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Berner Construction, Incorporated

Matteo Iron & Metal
Willow Woods MHC
Thorofare, New Jersey

Excavation & Removal of Lead Impacted Soil

Project Plan and Health and Safety Plan (HASP)

Approved By: J. Robert Gallagher — 6-22-06

J. Robert Gallagher, P.E.
Project Manager — Date

Andrea K. Irey — 6/22/06

Andrea K. Irey, P.E.
Quality Control/Quality Assurance Coordinator — Date

Acknowledged By: _____ _____

James Matteo
Owner's Representative
James Matteo & Sons — Date

June 2006 (Revision 2)

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Final 6/26

TABLE OF CONTENTS

ATTACHMENTS

ATTACHMENT 1 HOSPITAL ROUTE MAP

Matteo Iron & Metal Site Project Plan and Health and Safety Plan

1.0 GENERAL INFORMATION

1.1 INTRODUCTION

This Health and Safety Plan (HASP) was prepared by Berner Construction, Inc. (Berner Construction) to address the activities associated with the scope of work stated in the Removal Action Work Plan to excavate, remove, and dispose of lead impacted soil along the property line of Block 128 - Lot 2 (Matteo Iron & Metal Site) and Block 325-Lot 7 (Willow Woods Manufactured Home Community) in Thorofare, New Jersey. The HASP will be implemented by the Site Health and Safety Officer (Scott Welsh) for Sierra Environmental Services in accordance with their proposal dated May 30, 2006 during the site work to be conducted in June 2006. The Berner Construction Project Manager (PM) may also provide assistance in implementing this HASP. Compliance with this HASP is required of all persons and third parties that enter this site.

The health and safety guidelines in this HASP were prepared specifically with respect to the site conditions, purposes, dates, and personnel for this project. The content of this HASP may change or undergo revision based upon additional information made available to health and safety personnel or changes in the scope of work. Any proposed changes must be reviewed by the health and safety personnel prior to implementation and are subject to approval by the Project Manager.

1.2 SUMMARY

Berner Construction will provide oversight during the excavation, removal, testing, and transportation and disposal of lead impacted soil by Sierra Environmental, Inc. along the property line adjoining the Matteo and Willow Woods properties in the vicinity of manufactured housing units D-11, D-13, and F-6 in Thorofare, New Jersey and beneath manufactured home Unit D-13.

The surficial soils in this area have elevated levels of lead above New Jersey Residential Direct Contact Soil Clean Up Standards and these soils will be excavated and disposed of at an approved disposal site. The areas will be restored with clean fill, topsoil and revegetated. In addition, a chain link fence is being

erected to provide restricted access between the Matteo site and the adjoining Willow Woods Mobile Home Trailer Park. This fence will restrict all access to the existing scrap yard and to the vacant and unused portions of the rear of the property bordering the Horse Shoe Branch of the Hessian Run Creek.

1.3 ACKNOWLEDGEMENT

I acknowledge having reviewed this Health & Safety Plan, understand its contents and agree to abide by it. Additionally, I am current in the training and medical surveillance requirements specified in 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response.

NAME *(Please Print)*	SIGNATURE	COMPANY AFFILIATION	DATE
J. Robert Gallagher		Berner Construction, Inc.	

2.0 GENERAL INFORMATION

2.1 SCOPE OF SITE ACTIVITIES

The objective of this project is to excavate, remove, and dispose of all excavated soil material as outlined below:

1. Delineate Staging and Soil Loading Areas.
2. Excavate soil beneath manufactured home Unit D-13
3. Excavate and Stockpile Lead Impacted Soils
4. Perform XRF and Confirmatory Soil Sampling
5. Backfill Excavations and Seed and Restore Areas
6. Sample and Classify Excavated Soil
7. Load and Transport Excavated Soil to Approved Disposal Facility

2.2 TASK DESCRIPTION

2.2.1 Delineate Staging and Soil Loading Areas

Prior to the start of any excavation activities, a Staging and Soil Loading Area will be established on the Matteo property in the vicinity of housing unit F-6. This area will be screened using an XRF Alpha x-ray detection meter to reconfirm the testing performed by Weston Services for EPA. Once the limits of the clean area are established, 6-mil plastic sheeting will be placed on the ground for the soil staging and truck loading areas.

2.2.2 EXCAVATE AND STOCKPILE LEAD IMPACTED SOIL

Based on the results of the Weston Solutions soil testing, the areas in the vicinity of housing units D-11, D-13 and F-6, the elevated lead impacted soil will be excavated to a depth of 6 inches. The soil will be excavated by an excavator (and by hand in some areas) and placed in the soil stockpile on plastic sheeting with a backhoe.

Subsequent testing of the soil beneath Unit D-13 has determined that this soil has lead levels that exceed NJDEPs residential standards. The occupants of this unit will be temporarily relocated to off site hotels during the removal activities beneath this trailer. All exterior openings in the unit will be sealed with plastic to prevent any dust from entering the unit during the excavation activities.

The soil beneath the trailer will be loosened with shovels or hoes and the loosened soil vacuumed into a vacuum truck equipped with a HEPA filter. The soil will be excavated to a depth of 6 inches.

2.2.3 Perform XRF and Soil Sampling

A grid will be established on 15-foot centers across the excavated areas and the soil at the base of the excavation will be screened using a XRF Alpha x-ray detection meter. The protocol under EPA Method 6200 will be followed and the soil collected with clean dedicated scoops and placed in sealed zip lock baggies. Direct lead levels will be read with the XRF meter and a decision made to cease excavating or to continue to a greater depth based on these readings. Once all of the contaminated soil has been removed, soil samples will be obtained at a frequency consistent with NJDEP Technical Guidance for Site Remediation and submitted to a certified laboratory for total lead analysis. The samples will be obtained with dedicated clean scoops, placed on ice in a cooler, and transported to the laboratory under full chain of custody procedures.

2.2.4 Backfill Excavation

The soil samples will be analyzed on a expedited turn around basis (2 day TAT) and if the samples are below the NJDEP Residential Direct Contact Clean Up Standard, the excavation will be backfilled with certified clean topsoil and the area graded and seeded with a grass seed.

In any area where the samples do not meet the 400-ppm RDCSCC standard will be re-excavated and re-sampled until regulatory compliance levels are achieved.

2.2.5 Sample and Classify Excavated Soil

At the completion of all excavation activities, a representative composite soil sample will be obtained from the stockpiles soil by a Hazwoper trained technician for waste classification purposes. The sample will be obtained using a cleaned stainless steel trowel and the sample placed in laboratory supplied cleaned glassware and transported in an iced cooler under full chain of custody procedures.

2.2.6 Load and Transport Contaminated Soil to disposal facility

Upon receipt of the waste classification analysis, the excavated soil will be loaded in trucks for transport to the approved disposal facility (hazardous or non-hazardous). The trucks will be staged on plastic and covered and tarped before leaving the staging area. Care will be taken to avoid spilling of the soil during loading and any spilled soil will be cleaned up or new plastic placed to insure that a clean loading area is maintained.

3.0 HEALTH AND SAFETY RISK ANALYSIS

3.1 Underground Utility Clearance

A One Call utility mark out will be conducted to provide protection of underground utilities. Prior to the start of any on site activities, Sierra Environmental will notify the One Call operator for Dig Safe notification.

3.2 Non-chemical Hazards

Non-chemical hazards are associated with:

1. Mechanical (equipment)

   Care will be taken when working around mechanized equipment. All moving equipment will be equipped with horns to indicate reverse motions.

A competent person will provide hand signals to the equipment operator and this person will be capable of identifying existing and predictable hazards in the working area and has authorization to take prompt corrective action to eliminate these hazards.

The operator will be qualified to operate the equipment in accordance with promulgated standards and will have demonstrated the knowledge and experience on the equipment involved.

2. Lifting

Proper body positioning shall be used when lifting heavy objects (greater than 50 pounds). Heavy objects may be lifted by two people.

3. Ladders

Ladders shall be solidly constructed, in good working condition, and inspected prior to use.

4. Electrical

Electrical tools shall be of the double-insulated type and they shall be maintained in satisfactory condition. Electrical tools shall be inspected daily, before each use, to ensure they are free from physical defects such as frayed or worn cords, broken plugs, or broken housings.

Before operations begin, employees shall confirm by inquiry, direct observation, or instruments if there are any energized electrical circuits, exposed or concealed with which the employee(s) may come in contact and provide the necessary protection and warning against the hazard(s).

GFCIs are required to be used at all times for personnel protection for 120-volt, single-phase outlets.

5. Overhead power lines

A site inspection will be conducted prior to start of work to identify power lines that may be over the fence line property line.

6. Working Beneath the Trailer

Any work beneath the manufactured home unit (D-13) will be performed in level C protection and with extreme care. An assessment will be made of the supporting structures

used to support the trailer and all efforts made to minimize working time beneath this unit. Additional supports will be used if any conditions indicate that the trailer is unstable.

3.3 CHEMICAL HAZARDS

Based upon information provided to Berner Construction, the chemical hazards associated with this project are mainly associated with exposure to lead contaminated soil. Testing has indicated that soils contaminated with lead from the processing and recoveries of lead core including the battery casings are present.

The excavated areas will be kept wet during all excavation and soil handling activities to minimize dust generation.

Sierra Environmental Services will provide a Health and Safety Officer to perform air monitoring and will handle all contaminated soil handling activities including obtaining soil samples.

4.0 HEALTH AND SAFETY FIELD IMPLEMENTATION

4.1 PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIREMENTS

PPE may be upgraded or downgraded by the Site Health and Safety Coordinator (SHSC) or Field Supervisor based upon differing site conditions.

TABLE 4-1
PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIREMENTS

TASK No.	LEVEL OF PPE	PPE REQUIREMENTS						
		SUIT	GLOVES	FEET	HEAD	EYE	EAR	RESPIRATOR
1 thru 6	D	Standard Work Clothes	Leather or Canvas Work Gloves	Steel-toed Safety Boots	Hard Hat	Safety Glasses	None	Not Required
Unit D-13	C	Tyvek	Leather or Canvas Work Gloves	Steel-toed Safety Boots	Hard Hat	Safety Glasses	None	Full Faced Respirator

4.2 Monitoring Equipment Requirements

The excavation activities will be monitored for total dust using two DataRam PDR 1000. Dust levels exceeding 0.05 mg/m³ will result in all excavation activities ceasing until the soil can be wet to prevent the generation of dust. The monitors will be located in a down wind position of the workers.

Wipe samples will be taken in Unit D-13 before and after construction activities to monitor the effects of the removal activities and the effectiveness of sealing all of the exterior openings in the unit. One DataRam PDR 1000 will be placed inside the trailer during the excavation activities beneath this unit.

4.3 Decontamination Procedures

The equipment used to excavate and to load the excavated materials in the stockpile and on to the trucks used to haul the soil will be decontaminated with brushes and power washer (if necessary) at the completion of on site activities and before removal from the site. This work will be accomplished on a decontamination pad established in the soil staging area.

Any soil generated during this process will be placed in the last truck exiting the area or it will be placed in a 55-gallon drum for eventual shipment off site to an approved disposal facility. Any liquids generated during decontamination will be drummed for disposal for shipment to an approved disposal facility.

5.0 SITE OPERATING PROCEDURES

5.1 INITIAL SITE ENTRY PROCEDURES

- Prior to working on-site, a site inspection will be conducted for physical and chemical hazards.
- Prior to the start of work, a review of overhead utility clearance will be conducted.
- Specialized protocols particular to work tasks associated with the project will be identified, as appropriate.

5.2 DAILY OPERATING PROCEDURES

- Daily Tailgate Safety Meetings will be conducted prior to work start. *(See Attachment 2 for Daily Briefing Sign-In Sheet.)*
- Personal protective equipment (PPE) will be used as specified.
- The SHSC will be consulted for specific safety concerns for each individual site task.
- The locations of Fire Extinguisher, Eye Wash and First Aid Kit will be reviewed.

6.0 EMERGENCY RESPONSE PROCEDURES

6.1 EMERGENCY INCIDENT PROCEDURES

The nature of work at contaminated or potentially contaminated work sites makes emergencies a continual possibility. Although emergencies are unlikely and occur infrequently, a contingency plan is required to assure timely and appropriate response actions. The contingency plan is reviewed at tailgate safety meetings.

6.1.1 Emergency Incident Procedures

If an emergency incident occurs, the following actions will be performed:

Step 1: The situation will be assessed based on available information.

Step 2: The SHSC and/or Field Supervisor will be notified.

Step 3: Only trained and properly equipped personnel will respond to an emergency.

Step 4: Site personnel will be evacuated and emergency response agencies, e.g., police, fire, etc. notified, as appropriate.

Step 5: Personnel and equipment resources will be allocated and assistance will be requested from outside sources, as necessary.

Step 6: Using the emergency phone list, key project personnel will be contacted.

Step 7: An incident report will be prepared and forwarded to the Project Manager within 24 hours.

6.1.2 Medical Emergencies

If a medical emergency occurs, take the following action:

Step 1: The severity of the injury will be assessed and life-saving first aid/CPR will be performed, as necessary, to stabilize the injured person. Universal precautions will be followed to protect against exposure to blood borne pathogens.

Step 2: Medical attention will be obtained for the injured person immediately. (911 will be called or the Emergency Contacts will be contacted).

Step 3: The SHSC and Field Supervisor will be notified immediately. The Site Safety Officer will assume charge during a medical emergency.

Step 4: Depending on the type and severity of the injury, the injured employee will be transported to the nearest hospital emergency room.

Step 5: The injured person's personnel office, including the Project Manager, and Health and Safety Manager, will be notified.

Step 6: An accident report will be prepared by the SHSC. The SHSC will submit the report to the Health and Safety Manager (HSM) within 24 hours. HSM fax number is (717) 442-0457.

6.2 EMERGENCY ROUTES

See Hospital Route Map - Attachment 1

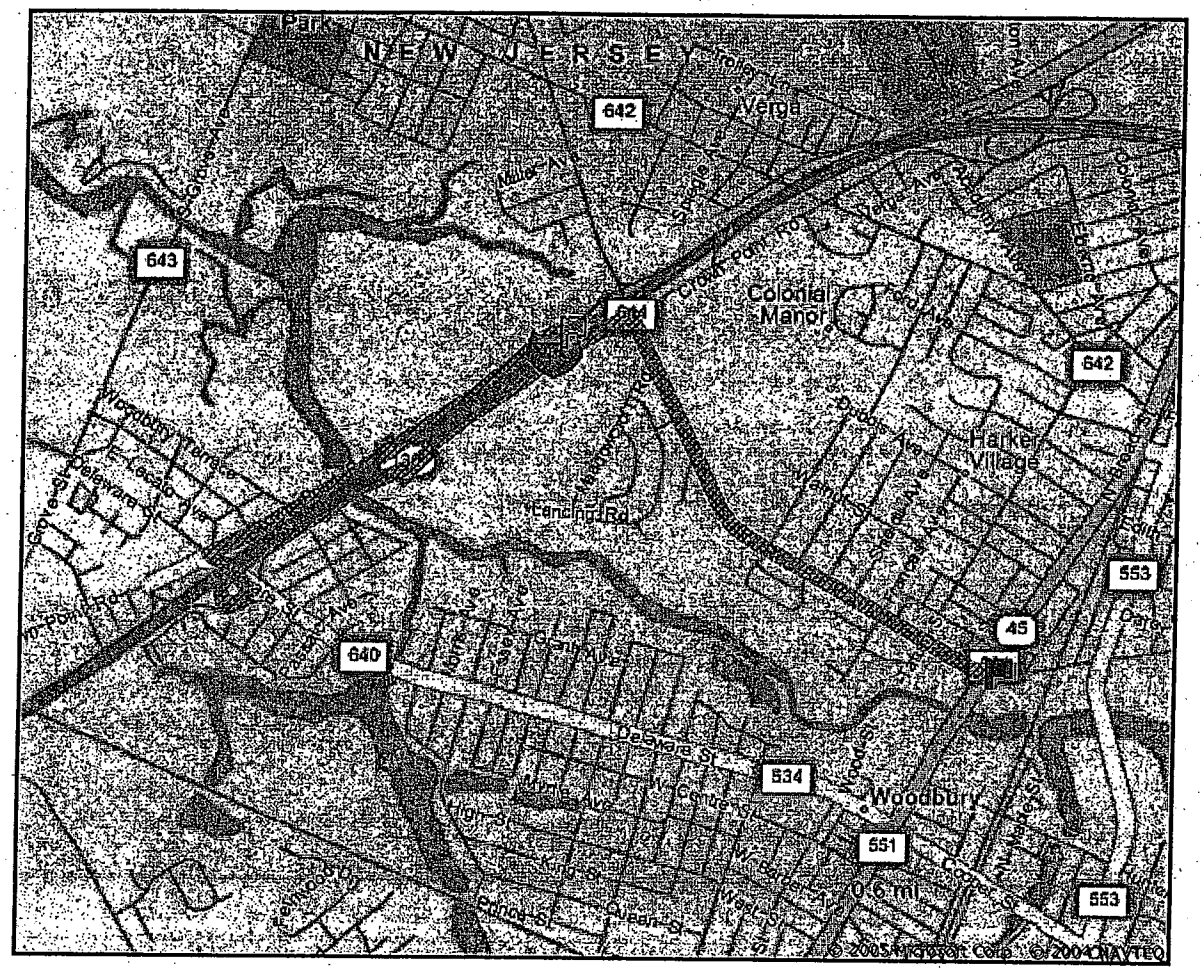
EMERGENCY CONTACTS
(To be Posted)

TITLE	NAME	PHONE NUMBER
EMERGENCY		
Police		911
Fire		911
Local Hospital-Underwood Memorial Hospital		(856) 845-0100
Local Ambulance/Rescue		911
Poison Control Center		1-800-822-3232
Hazardous Waste National Response Center	HAZMAT	1-800- 424-8802
PROJECT/BUSINESS		
Project Manager	J. Robert Gallagher, P.E.	(717) 442-3110 Office (267) 738-6067 Cell
Health & Safety Manager	Ed Pearl, Sierra	(856) 988-9259 Office (856) 304-8758 Cell
Field Supervisor	Ed Pearl, Sierra	(856) 988-9259 Office (856) 304-8758 Cell
Site Safety Officer	Ed Pearl	(856) 988-9259 Office (856) 304-8758 Cell
Client Contact –Matteo Iron & Metal	James Matteo	(856) 845-0398 Office
Site Contact	James Matteo	(856) 845-0398 Office

ATTACHMENT 1

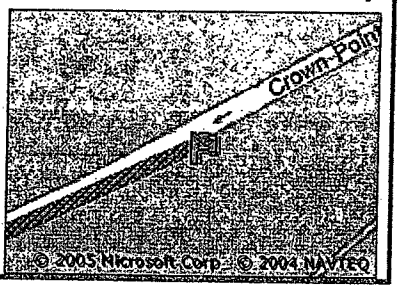
HOSPITAL ROUTE MAP

Windows Live Local
powered by Virtual Earth Beta



Start: 1692 Crown Point Rd, Thorofare, NJ
End: 509 n. Broad St, Woodbury, NJ

Distance: 3.5 mi
Time: 8 Minutes

Directions	Distance	Detail Map
Start: Depart on Crown Point Rd (West)	0.9 mi	

1:	Turn LEFT (South-East) onto CR-640 [Delaware St]	0.1 mi
2:	Bear RIGHT (South) onto Ramp	0.6 mi
3:	At exit 22, take Ramp (RIGHT) onto Crown Point Rd	0.7 mi
4:	Turn RIGHT (South) onto CR-644 [W Red Bank Ave]	1.2 mi
5:	Turn LEFT (North) onto SR-45 [CR-551]	
End:	Arrive at 509 n. Broad St, Woodbury, NJ	

Hospital Route Map to Underwood Memorial Hospital